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REMARK/DISCUSSION OF ISSUES

In the Final Office Action, Examiner Reis rejected pending claims 1-8 and 12-16 on various grounds. The Applicant responds to each rejection as subsequently recited herein, and respectfully requests reconsideration and further examination of the present application under 37 CFR § 1.116:

- A. Examiner Reis rejected pending claims 1-4, 6-8 and 12-16 under 35 U.S.C. §103(a) over U.S. Patent No. 6,292,528 to *Wieczorek* et al. in view of U.S. Patent No. 6,420,213 to *Nakajyo* et al.

The Applicant has thoroughly considered Examiner Reis' remarks concerning the patentability of claims 1-4, 6-8 and 12-16 over *Wieczorek* in view of *Nakajyo*. The Applicant has also thoroughly read *Wieczorek* in view of *Nakajyo*. The Applicant respectfully traverse this rejection of claims 1-4, 6-8 and 12-16, because Examiner Reis has failed to establish a *prima facie* case of obviousness as required by MPEP §2143. Specifically, Examiner Reis has failed to cite a suggestion or a motivation, in *Wieczorek* and *Nakajyo* to modify *Wieczorek* in view of *Nakajyo* to obtain the claimed invention as recited in independent claims 1 and 13.

Specifically, independent claim 1 recites "wherein said intermediate layer (2) contains at least two adhesives (A, B) of different consistency and spacers (5)", and independent claim 13 recites "said first intermediate layer (2) including a first spacer (5) in contact with said ceramic basic element (4) and said CMOS chip (3), a first adhesive (A1) adhered to said ceramic basic element (4) and said CMOS chip (3), and a second adhesive (B) adhered to said ceramic basic element (4) and said CMOS chip (3)". Examiner Reis correctly recognizes that *Wieczorek* teaches each limitation of claims 1 and 13 except for the aforementioned limitation of claims 1 and 13, and that *Nakajyo* discloses the aforementioned limitation of claims 1 and 13. Examiner Reis therefore asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the second adhesive and stub bumps/spacers disclosed by *Nakajyo* to the adhesive layers disclosed by *Wieczorek* with the

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expectation of creating a stronger physical and electrical bond between the scintillator and the CMOS chip, and between the CMOS chip and the ceramic basic element.

Again, the Applicant traverses this assertion by Examiner Reis, because the mere fact that *Wieczorek* can be modified in view of *Nakajyo* to obtain the claimed invention as recited in independent claims 1 and 13 does not render the resultant modification obvious unless the prior art also suggests the desirability of the combination. See, *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (Claims were directed to an apparatus for producing an aerated cementitious composition by drawing air into the cementitious composition by driving the output pump at a capacity greater than the feed rate. The prior art reference taught that the feed means can be run at a variable speed, however the court found that this does not require that the output pump be run at the claimed speed so that air is drawn into the mixing chamber and is entrained in the ingredients during operation. Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

The basis for Examiner Reis' assertion is that *Nakajyo* suggests the desirability of the combination by offering a physical and electrical bond between the scintillator and the CMOS chip, and between the CMOS chip and the ceramic basic element that would be expected to be stronger than a bond between the aforementioned components formed exclusively by the adhesive of *Wieczorek* or exclusively by the adhesive of *Nakajyo*. However, Examiner Reis CAN NOT conclusively assert that a bond between the aforementioned components formed by the combination of the adhesives taught by *Wieczorek* and *Nakajyo* would be expected to be stronger than a bond between the aforementioned components formed exclusively by the adhesive of *Wieczorek* or exclusively by the adhesive of *Nakajyo*. This is particularly true in view of the fact that neither *Wieczorek* nor *Nakajyo* describes an absolute strength of the physical and electrical bond provided by their

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adhesives or describes a relative strength of the physical and electrical bond provided by their adhesives as compared to other bonding techniques.

Moreover, *Wieczorek* teaches away from the incorporation of a spacer within the intermediate layer between the adhesive layer between the CMOS chip and the basic element. Specifically, as illustrated in FIGS. 2 and 3, *Wieczorek* is concerned with a minimization of electrical noise within the detector. To this end, *Wieczorek* teaches a minimization in the stretch of electrical leads by incorporating a thin adhesive layer 16 between CMOS ship 9 and bond pads 17 of basic element 15. See, *Wieczorek* at column 2, line 43-54; and column 5, lines 13-16. The Applicant respectfully asserts that the addition of a spacer within adhesive layer 16 would prevent *Wieczorek* from minimizing the stretch of electrical leads between CMOS ship 9 and the bond pads 17 of basic element 15, and is therefore undesirable.

In summary, Examiner Reis fails to provide a suggestion or a motivation to modify *Wieczorek* in view of *Nakajyo* as proposed by Examiner Reis, and *Wieczorek* teaches away from the modification of *Wieczorek* in view of *Nakajyo* as proposed by Examiner Reis. Withdrawal of the rejection of independent claims 1 and 13 under §103(a) as being unpatentable over *Wieczorek*, in view of *Nakajyo* is therefore respectfully requested.

Claims 2-4, 6-8 and 12 depend from independent claim 1. Therefore, dependent claims 2-4, 6-8 and 12 include all of the elements and limitations of independent claim 1. It is therefore respectfully submitted by the Applicant that dependent claims 2-4, 6-8 and 12 are allowable over *Wieczorek*, in view of *Nakajyo* for at least the same reason as set forth herein with respect to independent claim 1 being allowable over *Wieczorek*, in view of *Nakajyo*. Withdrawal of the rejection of dependent claims 2-4, 6-8 and 12 under U.S.C. §103(a) as being patentable over *Wieczorek*, in view of *Nakajyo* is therefore respectfully requested.

- B. Examiner Reis rejected pending claim 5 under 35 U.S.C. §103(a) over U.S. Patent No. 6,292,528 to *Wieczorek* et al. in view of U.S. Patent No. 6,420,213 to *Nakajyo* et al. and in further view of U.S. Patent No. 6,063,688 to *Doyle* et al.

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Claim 5 depends from independent claim 1. Therefore, dependent claim 5 includes all of the elements and limitations of independent claim 1. It is therefore respectfully submitted by the Applicant that dependent claim 5 is allowable over *Wieczorek*, in view of *Nakajyo* and in further view of *Doyle* for at least the same reason as set forth herein with respect to independent claim 1 being allowable over *Wieczorek*, in view of *Nakajyo*. Withdrawal of the rejection of dependent claim 5 under U.S.C. §103(a) as being patentable over *Wieczorek*, in view of *Nakajyo* and in further view of *Doyle* is therefore respectfully requested.

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SUMMARY

Examiner Reis' rejections of pending claims 1-8 and 12-16 have been obviated by the remarks herein supporting an allowance of claims 1-8 and 12-16 over *Wieczorek* in view of *Nakajyo*. The Applicant respectfully submits that claims 1-8 and 12-16 as listed herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and early passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, Examiner Reis is respectfully requested to contact the undersigned at the telephone number listed below.

Dated: January 28, 2004

Respectfully submitted,
Ralf Forscheid et al.

PHILIPS INTELLECTUAL PROPERTY
& STANDARDS
P.O. Box 3001
Briarcliff Manor, NY 10510

John F. Vodopia
Registration No. 36,299
Attorney for Applicant



CARDINAL LAW GROUP
Suite 2000
1603 Orrington Avenue
Evanston, Illinois 60201
Phone: (847) 905-7111
Fax: (847) 905-7113

Darrin Wesley Harris
Registration No. 40,636
Attorney for Applicant